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USEPA SF



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SALT
Box 101255
Anchorage, Alaska 99510

How Can I Protect My Health ?

You can demand two things; (1) you have a right to clean air and water, and (2) MAPCO must reveal the how and why of the hazardous waste problems.

1. Pollution control technology for air strippers is available, inexpensive, and effective. It is pointless to clean up the ground water by dumping pollution in the air where even more people will be unknowingly placed at risk.

2. MAPCO is keeping secret information about a major hazardous waste clean up. Federal laws require public hearings before the clean up can be approved. These hearings were never held.

What Exactly Should I Do ?

WRITE A SHORT LETTER NOW

Write DEC at the address below.

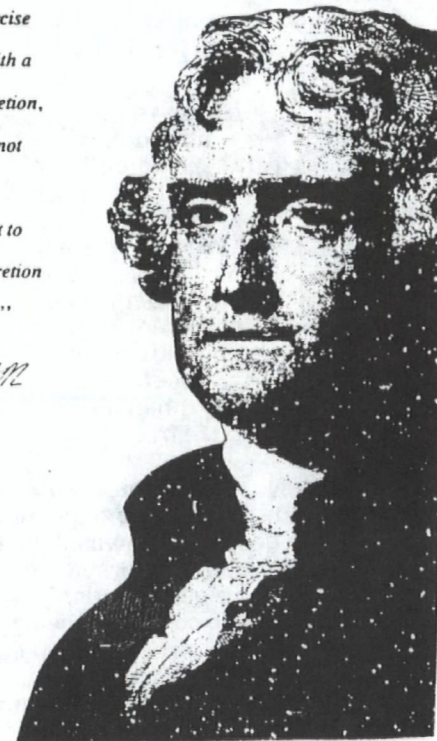
1. I want the best air pollution control technology on the air strippers, as well on all other MAPCO benzene emissions.
2. I demand a hearing in North Pole for public approval on "how clean is clean" regarding MAPCO's clean up.

Even if you don't live in North Pole, it is especially important to write because there are over 800 other contaminated sites that are now using or may in the future use air stripping methods for cleaning up ground water pollution.

DEC Commissioner
Box 0
Juneau, Alaska 99811-1800

"I know no safe
depository of the
ultimate powers
of the society but the
people themselves;
and if we think
them not enlightened
enough to exercise
their control with a
wholesome discretion,
the remedy is not
to take it
from them, but to
inform their discretion
by education."

Jefferson

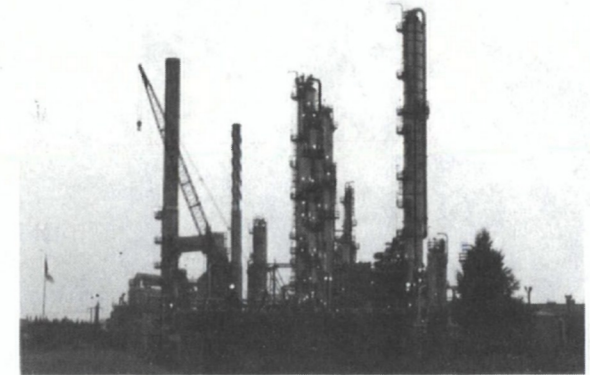


Is MAPCO Polluting Your Air ?

The MAPCO refinery in North Pole is using the air we breathe for a dump. A "clean up" method called *air stripping* simply puts cancer causing chemicals from the contaminated ground water into the air.

What Did MAPCO Dump ?

Hundreds of thousands of gallons of fuel were spilled on the ground and at least 180 barrels of hazardous waste were intentionally dumped into leaky sewers. During "clean up" operations MAPCO violated additional federal and state laws by shipping 231 barrels of listed hazardous waste to Anchorage, dumping the residues into a landfill neither permitted nor designed for hazardous wastes.



Why Haven't I Heard About These Problems Before ?

MAPCO told the Environmental Protection Agency that "oil spill reports, soil & water analyses, and concentrations of aromatics and halogens in water" were **COMPANY SECRETS AND CONFIDENTIAL**. Only after citizens made Freedom of Information Act requests did these pollution problems become known.

EPA Region 10
Chief of Hazardous Waste
1200 6th Ave
Seattle, WA 98101



Risks to Public Health A Citizen Viewpoint

MAPCO spilled and dumped cancer causing chemicals up hill from a public school and the North Pole community well. MAPCO leases the refinery property from the state, so this pollution of the soil and ground water is on public lands. Yet MAPCO states in their "Community Relations Plan" *there is no need for any community involvement in the investigation.*

In the past, MAPCO endangered its own employees by contaminating a drinking water well. Today, MAPCO is moving pollution from the ground water to the air thereby increasing the risk of cancer to unknowing residents. Tomorrow, if filters were required on the air strippers, pollution could be controlled.



"Put it in
your own
back yard!"

The ground water is extremely polluted; for example, one pollutant called benzene, exceeds the drinking water standard by as much as 3,800 times. All the pollution is currently dumped into the air we breathe. The amount of benzene people breathe night and day depends on the wind and rain.

A Scientific Review

Benzene is used to increase the octane rating in gasoline. The vapors are colorless. Exposure at high concentrations is fatal within minutes. All exposures to benzene increase the risk of *leukemia*, a disease characterized by excess production of abnormal white cells, in other words cancer of the bone marrow.

Besides benzene MAPCO contaminated ground water with 7 additional cancer causing chemicals; 3 that cause birth defects; another that causes liver and kidney damage; and one that causes irregular heart beats but has not been tested for cancer or reproductive effects.

Toxic Chemicals Dumped in Your Air by MAPCO **EVERYDAY**

benzene
chloroform
1,2 dichloroethane
methylene chloride
1,2 dichlorobenzene
tetrachloroethylene
1,1 dichloroethane
trichloroethylene
carbon disulfide
ethylbenzene
acetone
phenol
freon

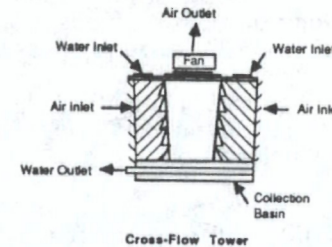
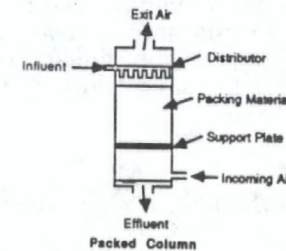
Unfortunately, an estimated 200 workers may have died due to benzene exposure on the job because the government was delayed 11 years due to an industry lawsuit in lowering a regulated work place standard from 10 ppm to 1 ppm. Many scientists believe 1 ppm is still too high to protect workers and the National Institute of Occupational Safety and Health has recommended another tenfold decrease to 0.1 ppm.

Who benefits? Who bears the risk? Who decides what an "acceptable level of cancer risk" is from benzene exposure? And what about entire families exposed around the clock? Work place standards are only intended for healthy adults exposed for only five 8 hour work days per week and cannot be used to assess community exposures. In addition, the effects of multiple exposures are not well studied or understood, as is the case for the North Pole community.

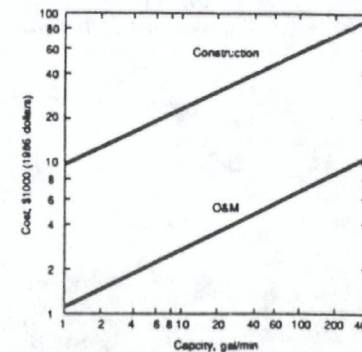
An Engineering Analysis

Benzene is effectively and cheaply removed from either air or water with activated carbon filters. A simple unit capable of treating well over 100,000 gallons a day can be built for less than \$50,000 and costs less than \$20/day to operate. Activated carbon filters can remove benzene from either contaminated ground water or air.

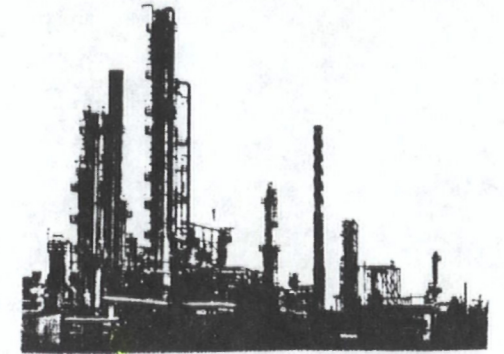
Types of Air Stripping Equipment



Estimated costs of various sizes of
Activated Carbon Adsorption Units.



A Legal Evaluation



Any increase in benzene emissions brings a facility within the scope of the air quality program known as "Prevention of Significant Deterioration." Since operation of the air strippers results in the release of significant quantities of benzene, MAPCO would ordinarily be required to install pollution control technology that is considered BAT. The Alaska Department of Environmental Conservation apparently does not intend to require the "best available technology" (BAT) on air strippers under an air permit. Although this decision rests on questionable legal analysis, a state permit that ignores the new regulations does not insulate MAPCO from violations of the federal Clean Air Act.

If the state fails to require compliance with the Clean Air Act, EPA has the authority and the responsibility to do so. In addition, citizens are authorized to file law suits against violators of the Clean Air Act under circumstances like these.

This public health alert is funded by the **Alaska Conservation Foundation**. Preparation of this alert is the responsibility of **Science & Law Limiting Toxics (SALT)**.

SALT is a nonprofit group of citizens, scientists, engineers, and environmental attorneys helping Alaskans affected by pollution. For more information regarding MAPCO pollution call or write:

SALT
Box 101255
Anchorage, Alaska 99510
(907) 276-2721